

Amendments to the Claims

The following list of claims replaces all previous versions of claims. Applicant has amended claims marked as currently amended, and cancelled claims marked as cancelled, voluntarily without prejudice.

11. (Currently Amended) A method for configuring a system having a plurality of processors to provide the system with at least one cluster of processors, each cluster having one service point, the method comprising the steps of:

computing a distance from each processor to other processors in the system;

computing a plurality of total distances, where each total distance is associated with one processor;

determining a minimum total distance from the plurality of total distances; ~~and~~

assigning as the service point the processor having the minimum total distance associated therewith;

partitioning the system into a plurality of clusters, the partitioning comprising:

sorting the processors in accordance with the total distance associated with each processor;

assigning each processor to one of two clusters;

determining a minimum total distance for the processors in each cluster in accordance with the plurality of total distances associated with the processors in said cluster; and

assigning as the service point for each cluster the processor having the minimum total distance associated therewith in said cluster,

subdividing one of said two clusters into two subdivided clusters, thereby partitioning the system into three clusters;

determining a minimum total distance for the processors in each of said three clusters in accordance with the plurality of total distances associated with the processors in said three clusters;

assigning the processors to said three clusters in accordance with the minimum total distance; and

assigning as the service point for each of said three clusters the processor having the minimum total distance associated therewith in said cluster.

12-15. (Cancelled)

16. (Original) A method according to claim 11, wherein said configuring is performed dynamically when a processor is added to the system.

17. (Original) A method according to claim 11, wherein said configuring is performed dynamically when a processor is removed from the system.

18. (Original) A method according to claim 17, wherein the partitioning of the system is dynamically changed when a processor is removed from the system.

19. (Original) A method according to claim 11, further comprising the step of assigning another processor as a backup service point.

20. (Cancelled)